

CLAIMS

What is claimed is:

1. A method of making a powder for human or animal consumption having improved organoleptic qualities, comprising:
  - making an aqueous slurry containing calcium and magnesium;
  - fully solubilizing said aqueous slurry in an aqueous acid solution to produce a solution containing solubilized calcium and magnesium; and
  - drying said solution containing solubilized calcium and magnesium to produce a dried, readily solubilizable product having an amorphous structure,
- 10 wherein the product is adapted for human consumption in a form selected from the group consisting of
  - (i) solubilized in an aqueous solution to produce solubilized calcium and solubilized magnesium, such that solubilized magnesium is present in an amount effective to enhance the solubility and long term stability of the solubilized calcium,
  - (ii) a dried powder in granular form,
  - (iii) a dried powder in tabular form,
  - (iv) incorporated into a gum,
  - (v) incorporated into pharmaceutical dose,
  - 20 (vi) incorporated into a beverage, and
  - (vii) incorporated into a food.
- 25 2. The method of making a powder for human consumption according to claim 1, wherein the form of the product for human consumption selected is incorporated into a beverage and the beverage is selected from the group consisting of tea, fruit juice, carbonated drinks and sports drinks.
3. The method of making a powder for human or animal consumption according to claim 1, wherein the form of the product for human consumption selected is incorporated into a food and the food is selected from the group consisting of candy, gelatin products and puddings.
- 30 4. The method of making a powder for human or animal consumption according to claim 1, wherein the form of the product for human

consumption selected is solubilized in an aqueous solution to produce solubilized calcium and solubilized magnesium, such that solubilized magnesium is present in an amount effective to enhance the solubility and long term stability of the solubilized calcium, and the method further includes 5 the steps of:

solubilizing the dried compound having an amorphous structure in water to produce a drink containing solubilized calcium and solubilized magnesium; and

packaging the drink in a sealed container.

10 wherein the drink in the sealed container has a shelf life of at least 6 months with the calcium remaining in solution for said at least 6 months.

15 5. The method of making a powder for human or animal consumption according to claim 4, wherein the form of the product for human consumption selected is incorporated into a beverage and the beverage is selected from the group consisting of tea, fruit juice, carbonated drinks and sports drinks.

6. The method of making a powder for human or animal consumption according to claim 1, wherein the magnesium and calcium in the product are present in a magnesium:calcium weight ratio of from 1:1 to 1:10.

20 7. The method of making a powder for human consumption according to claim 2, wherein the magnesium and calcium in the product are present in a magnesium:calcium weight ratio of from 1:1 to 1:10.

25 8. The method of making a powder for human or animal consumption according to claim 3, wherein the magnesium and calcium in the product are present in a magnesium:calcium weight ratio of from 1:1 to 1:10.

9. The method of making a powder for human or animal consumption according to claim 4, wherein the magnesium and calcium in the product are present in a magnesium:calcium weight ratio of from 1:1 to 1:10.

10. The method of making a powder for human or animal consumption according to claim 5, wherein the magnesium and calcium in the product are present in a magnesium:calcium weight ratio of from 1:1 to 1:10

11. The method of making a powder for human or animal consumption according to claim 1, wherein the product has an individual serving size of at least 250 mg of calcium are present in an individual serving.

12. The method of making a powder for human or animal consumption according to claim 2, wherein the product has an individual serving size of at least 250 mg of calcium are present in an individual serving.

10 13. The method of making a powder for human or animal consumption according to claim 3, wherein the product has an individual serving size of at least 250 mg of calcium are present in an individual serving.

14. The method of making a powder for human or animal consumption according to claim 4, wherein the product has an individual serving size of at least 250 mg of calcium are present in an individual serving.

15 15. The method of making a powder for human or animal consumption according to claim 5, wherein the product has an individual serving size of at least 250 mg of calcium are present in an individual serving.

16. A liquid supplement comprising:  
20 water;  
solubilized calcium; and  
solubilized magnesium,

wherein the solubilized calcium is present in a ratio of at least 250 mg solubilized calcium per 8 fluid ounces of water and the solubilized magnesium  
25 is present in an amount effective to enhance the solubility of the solubilized calcium such that the solubilized calcium is operative to remain in solution in the liquid supplement without precipitating therefrom for at least 6 months.

17. The liquid supplement of claim 16 wherein the solubilized calcium is present in a ratio of at least 333 mg solubilized calcium per 8 fluid ounces of water.

18. The liquid supplement of claim 16 wherein the solubilized calcium is present in a ratio of at least 500 mg solubilized calcium per 8 fluid ounces of water.

19. The liquid supplement of claim 16 wherein the solubilized calcium is present in a ratio of at least 1000 mg solubilized calcium per 8 fluid ounces of water.

10        20. A liquid for consumption by a mammal, comprising:  
water;  
solubilized calcium; and  
solubilized magnesium,  
wherein the calcium is present in the water in a calcium:water ratio by weight  
15 of from about 250:230 to about 1000:230 and the solubilized magnesium is  
present in an amount effective to enhance the solubility of the solubilized  
calcium such that the solubilized calcium is operative to remain in solution in  
the liquid supplement without precipitating therefrom for at least 6 months.

A handwritten signature or mark, possibly "P. J. O'Leary", is written in black ink above a handwritten date "May 10, 1984".